

**Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1-104 . (Canceled).

105. (Currently Amended) A method of treating ~~infertility~~ **recurrent miscarriage** by inducing immune tolerance to a paternal antigen in a mammalian prospective mother lacking said immune tolerance, said method comprising exposing a mucosal surface of said prospective mother to:

a) semen or an MHC Class I antigen **on the sperm** of a prospective father capable of eliciting a Th-1 response; and

b) a substantially purified TGF $\beta$  selected from the group consisting of TGF $\beta$ 1, TGF $\beta$ 2, and TGF $\beta$ 3,

~~wherein said MHC Class I antigen is one which is present on leukocytes or in seminal plasma of said prospective father;~~ and wherein the exposure is at a time and in an amount effective to induce said immune tolerance.

106. (Previously Presented) The method according to claim 105, wherein the prospective mother and father are both human.

107. (Currently Amended) The method according to claim 105, wherein the TGF $\beta$  and the semen or MHC Class I antigens ~~are~~ **is** administered at one site.

108. (Previously Presented) The method according to claim 105, wherein the TGF $\beta$  and the semen or MHC Class I antigen are respectively administered at a first site and a different site.

109. (Previously Presented) The method according to claim 105, wherein the TGF $\beta$  and the semen or MHC Class I antigen are administered temporally spaced apart.
110. (Previously Presented) The method according to claim 109, wherein the semen or MHC Class I antigen is administered subsequent to an administration of TGF $\beta$ .
111. (Previously Presented) The method according to claim 109, wherein the semen or MHC Class I antigen is administered first followed by administration of TGF $\beta$ .
112. (Previously Presented) The method according to claim 105, wherein the MHC Class I antigen is from sperm cells of the prospective father.
113. (Previously Presented) The method according to claim 105, wherein the semen or MHC Class I antigen is presented in purified or semi-purified form.
114. (Previously Presented) The method according to claim 113, wherein the purified or semi-purified semen or MHC Class I antigen is presented on an inert or adjuvant carrier.
115. (Previously Presented) The method according to claim 105, wherein the prospective mother and father are human, and the concentration of TGF $\beta$  is greater than 50 ng/mL, with a total dose of 150 ng.
116. (Previously Presented) The method according to claim 105, wherein the TGF $\beta$  is supplied in a slow release form.
117. (Previously Presented) The method according to claim 105, wherein the exposure of the semen or MHC Class I antigen is to the prospective mother's genital tract in the form of the prospective father's ejaculate.

118. (Previously Presented) The method according to claim 105, wherein the mucosal surface is selected from the group comprising of an oral mucosal surface, a respiratory mucosal surface, a gastrointestinal mucosal surface and a genital mucosal surface.

119. (Previously Presented) The method according to claim 105, wherein the mucosal surface is a genital mucosal surface.

120. (Previously Presented) The method according to claim 105, wherein the mucosal surface is exposed to a concentration of TGF $\beta$  of between 100 and 400 ng/ml.

121. (Previously Presented) The method according to claim 105, wherein the mucosal surface is exposed to a concentration of TGF $\beta$  of 100ng/ml.

122. (Previously Presented) The method according to claim 105, wherein the mucosal surface is exposed to a concentration of TGF $\beta$  of 200ng/ml.

123. (Previously Presented) The method according to claim 105, wherein the mucosal surface is exposed to a concentration of TGF $\beta$  of between 100 and 400 ng/mL, with a total dose of between 100 to 2000 ng.

124. (Previously Presented) The method according to claim 105, wherein TGF $\beta$  is administered in its active form.

125. (Previously Presented) The method according to claim 105, wherein the prospective mother is incapable of converting a sufficient amount of the inactive form of TGF $\beta$  to active TGF $\beta$ , and the method includes administration of active TGF $\beta$ .

126. (Previously Presented) The method according to claim 105, wherein the prospective mother is incapable of converting the inactive form of TGF $\beta$  to active TGF $\beta$ , and the method includes administration of plasmin, so as to increase the level of active TGF $\beta$ .

127. (Previously Presented) The method according to claim 105, wherein the prospective mother and father are human and the exposure to TGF $\beta$  and the semen or MHC Class I antigen of the prospective father is a multiple exposure.

128. (Previously Presented) The method according to claim 127, wherein the multiple exposure is performed over a period spanning at least three months prior to attempted conception.

129. (Previously Presented) The method according to claim 128, wherein the exposure continues over a period of the first 12 weeks of pregnancy.

130. (Previously Presented) The method according to claim 105, wherein the prospective mother and father are human and exposure is at least one week before attempted conception.

131. (Previously Presented) The method according to claim 105, wherein the exposure is before attempted conception.

132. (Previously Presented) The method according to claim 105, wherein administration of TGF $\beta$  and the semen or MHC Class I antigen occurs at least once after attempted conception.

133. (Previously Presented) The method according to claim 105, further including a step, prior to exposure to antigen and TGF $\beta$ , of diagnosing or testing whether  
(a) the prospective father has adequate levels of TGF $\beta$ ;

- (b) the prospective mother has the capacity to activate TGF $\beta$ , or
- (c) anti-sperm antibodies are present in the prospective mother.

134. (Previously Presented) The method according to claim 105, used in conjunction with IVF treatment.

135. (Canceled).

136. (Canceled).

137. (Canceled).

138. (Canceled).

139. (Canceled).

140. (Canceled).